

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1.-16. (Cancelled)

17. (New) A process for the hydrogenation, dehydrogenation or hydrogenolysis reaction of an organic or inorganic compound capable of undergoing said reaction comprising reacting said compound in a hydrogenation, dehydrogenation or hydrogenolysis reaction in the presence of a shaped metal fixed-bed catalyst comprising at least one catalyst alloy of a catalyst metal and an extractable alloying component, wherein the catalyst is free of a pure catalyst metal and alpha-aluminum oxide, has a total pore volume of 0.1 to 0.6 ml/g, and a bulk density lower than 2.2 kg/l, and is activated in an outer layer having a thickness of 0.1 to 2.0 mm by at least a partial extraction of the extractable alloying component from the catalyst alloy.

18. (New) The process according to Claim 17, wherein the catalyst metal of the catalyst alloy is a member selected from the group consisting of nickel, cobalt, copper, iron, and mixtures thereof, and the extractable alloying component of the catalyst alloy is a member selected from the group consisting of aluminum, zinc and silicon, and the ratio by weight of catalyst metal to extractable alloying component is from 30:70 to 70:30.

19. (New) The process according to Claim 17, wherein the catalyst contains a dopant in an amount up to 15 wt. %, with respect to the weight of catalyst alloy, selected from the group consisting of chromium, iron, cobalt, tantalum, molybdenum, titanium, and mixtures thereof, as a promoter.

20. (New) A process for the hydrogenation of an organic compound selected from the group consisting of nitro compounds, imines, nitriles, compounds containing a C=C double band, compounds containing a C≡C triple band, compounds containing an aromatic or heteroaromatic ring, carbonyl compounds and epoxide compounds, comprising

contacting said organic compound with hydrogen for a sufficient period of time in the presence of a shaped metal fixed-bed catalyst comprising at least one catalyst alloy of a catalyst metal and an extractable alloying component, wherein the catalyst is free of a pure catalyst metal and alpha-aluminum oxide, has a total pore volume of 0.1 to 0.6 ml/g, and a bulk density lower than 2.2 kg/l, and is activated in an outer layer having a thickness of 0.1 to 2.0 mm by at least a partial extraction of the extractable alloying component from the catalyst alloy to thereby obtain hydrogenation of said organic compound.

21. (New) The process according to Claim 20, wherein the catalyst metal of the catalyst alloy is a member selected from the group consisting of nickel, cobalt, copper, iron, and mixtures thereof, and the extractable alloying component of the catalyst alloy is a member selected from the group consisting of aluminum, zinc and silicon, and the ratio by weight of catalyst metal to extractable alloying component is from 30:70 to 70:30.

22. (New) The process according to Claim 20, wherein the catalyst contains a dopant in an amount up to 15 wt. %, with respect to the weight of catalyst alloys, selected from the group consisting of chromium, iron, cobalt, tantalum, molybdenum, titanium, and mixtures thereof, as a promoter.

23. (New) A process for the dehydrogenation of an alcohol to yield a carboxylic acid comprising contacting an alcohol with a shaped metal fixed-bed catalyst comprising at least one

catalyst alloy of a catalyst metal and an extractable alloying component, wherein the catalyst is free of a pure catalyst metal and alpha-aluminum oxide, has a total pore volume of 0.1 to 0.6 ml/g, and a bulk density lower than 2.2 kg/l, and is activated in an outer layer having a thickness of 0.1 to 2.0 mm by at least a partial extraction of the extractable alloying component from the catalyst alloy to thereby obtain a carboxylic acid.

24. (New) The process according to Claim 23, wherein the catalyst metal of the catalyst alloy is a member selected from the group consisting of nickel, cobalt, copper, iron, and mixtures thereof, and the extractable alloying component of the catalyst alloy is a member selected from the group consisting of aluminum, zinc and silicon, and the ratio by weight of catalyst metal to extractable alloying component is from 30:70 to 70:30.

25. (New) The process according to Claim 23, wherein the catalyst contains a dopant in an amount up to 15 wt. %, with respect to the weight of catalyst alloys, selected from the group consisting of chromium, iron, cobalt, tantalum, molybdenum, titanium, and mixtures thereof, as a promoter.

26. (New) A process for the dehydrogenation of an aminoalkanol to yield an aminocarboxylic acid comprising contacting an aminoalkanol with a shaped metal fixed-bed catalyst comprising at least one catalyst alloy of a catalyst metal and an extractable alloying component, wherein the catalyst is free of a pure catalyst metal and alpha-aluminum oxide, has a total pore volume of 0.1 to 0.6 ml/g, and a bulk density lower than 2.2 kg/l, and is activated in an outer layer having a thickness of 0.1 to 2.0 mm by at least a partial extraction of the extractable alloying component from the catalyst alloy to thereby obtain an aminocarboxylic acid.

27. (New) The process according to Claim 26, wherein the catalyst metal of the catalyst alloy is a member selected from the group consisting of nickel, cobalt, copper, iron, and mixtures thereof, and the extractable alloying component of the catalyst alloy is a member selected from the group consisting of aluminum, zinc and silicon, and the ratio by weight of catalyst metal to extractable alloying component is from 30:70 to 70:30.

28. (New) The process according to Claim 26, wherein the catalyst contains a dopant in an amount up to 15 wt. %, with respect to the weight of catalyst alloys, selected from the group consisting of chromium, iron, cobalt, tantalum, molybdenum, titanium, and mixtures thereof, as a promoter.

29. (New) A process for preparing isophorone diamine from isophorone nitrile comprising in a first stage reacting isophorone and ammonia in the presence of an acid imination catalyst to form an iminonitrile, and in a second stage hydrogenating and aminating said iminonitrile in the presence of a shaped metal fixed-bed catalyst comprising at least one catalyst alloy of a catalyst metal and an extractable alloying component, wherein the catalyst is free of a pure catalyst metal and alpha-aluminum oxide, has a total pore volume of 0.1 to 0.6 ml/g, and a bulk density lower than 2.2 kg/l, and is activated in an outer layer having a thickness of 0.1 to 2.0 mm by at least a partial extraction of the extractable alloying component from the catalyst alloy, to thereby obtain isophorone diamine.

30. (New) A process for the hydrogenation, dehydrogenation or hydrogenolysis reaction of an organic or inorganic compound capable of undergoing said reaction comprising reacting said compound in the presence of a shaped metal fixed-bed catalyst made by a process comprising:

component which is free of a pure catalyst metal with a high molecular weight polymer to form a shapable mixture,

shaping the mixture to produce a freshly prepared shaped article,

thermally treating said article at temperatures between 100 and 300°C to remove the polymer through decomposition,

calcining the freshly prepared shaped article at a temperature of less than 850°C,

and

activating the shaped article by extracting at least a portion of the extractable alloying component with an alkaline solution,

wherein the high molecular weight polymer is a polyoxymethylene homopolymer or copolymer with a melt volume index MVI (according to DIN ISO 1133, measured at 190°C with a load of 2.16 kg) from 1 to 50.

31. (New) The process according to Claim 30, wherein the catalyst has an average particle size of 30 to 120µm, and is added to the polyoxymethylene in an amount of 5 to 100 wt.% with respect to the amount of catalyst in the mixture.

32. (New) The process according to Claim 30, wherein the high molecular weight polymer decomposition is in the presence of an acid medium at temperatures between 100 and 300°C, and wherein an approximately constant rate of decomposition of 6 to 10 grams of formaldehyde per kilogram of polyoxymethylene used per minute is set by controlling a rate of heating and/or a rate of addition of the acid medium.

33. (New) A process for the hydrogenation, dehydrogenation, hydrogenolysis reaction of an organic or inorganic compound capable of undergoing said reaction comprising reacting

said compound in the presence of a shaped metal fixed-bed catalyst made by a process comprising:

mixing with a high molecular weight polymer at least one alloy powder, which alloy comprises:

a catalyst metal, and

an extractable alloying component, wherein the alloy is free of unalloyed pure catalyst metal,

shaping the mixture to produce a freshly prepared shaped article,

thermally treating the shaped article at temperatures between 100 and 300°C to

remove the polymer through decomposition,

calcining the freshly prepared shaped article at a temperature of less than 850°C, and

activating the shaped article by extracting at least a portion of the extractable alloying component with an alkaline solution.

34. (New) The process according to Claim 33, wherein the catalyst has an average particle size of 30 to 120 $\mu$ m, and is mixed with the polyoxymethylene in an amount of 5 to 100 wt.% with respect to the amount of catalyst in the mixture.

35. (New) A process for the hydrogenation, dehydrogenation or hydrogenolysis reaction of an organic or inorganic compound capable of undergoing said reaction comprising reacting said compound in the presence of a shaped metal fixed-bed catalyst made by a process comprising:

mixing at least one alloy powder of a catalyst metal and an extractable alloying component which is free of a pure catalyst metal with a high molecular weight polymer to form a shapable mixture,

shaping the mixture to produce a freshly prepared shaped article,

thermally treating said article at temperatures between 100 and 300°C to remove the polymer through decomposition,

calcining the freshly prepared shaped article at a temperature of less than 850°C, to ensure that any aluminum oxide formed is present only in the form of  $\gamma$ -aluminum oxide which is dissolved out of the shaped article during the subsequent activating step, and

activating the shaped article by extracting at least a portion of the extractable alloying component with an alkaline solution,

wherein the high molecular weight polymer is a polyoxymethylene homopolymer or copolymer with a melt volume index MVI (according to DIN ISO 1133, measured at 190°C with a load of 2.16 kg) from 1 to 50.